## WRITING EQUATIONS OF LINES GIVEN 2 POINTS - DAY 1

Write the equation of the lines passing through the given points in slope-intercept form.

1. $(4,-3)$ and $(3,-6)$

When given two or more points, you can also use the STAT function in your calculator to find the equation of the line.

- Step 1: Go to STAT on your calculator.
- Step 2: EDIT is highlighted so press ENTER
- Step 3: Clear out anything that is in $L_{1}$ and $L_{2}$ : Up arrow to highlight $L_{1}$, CLEAR, ENTER, Arrow over, Up arrow to highlight $L_{2}$, CLEAR, ENTER.
- Step 4: Enter x's in $L_{1}$. Press ENTER after each entry.
- Step 5: Arrow over and enter y's in $L_{2}$. Press ENTER after each entry.
- Step 6: Go back to STAT. Arrow over to CALC.
- Step 7: Choose \#4 LinReg(ax+b).
- Step 8: Arrow down to "Calculate," and press ENTER.

Use the STAT function in your calculator to find the equation of the lines passing through the following points.
2. $(-5,-5)$ and $(5,7)$
3. $(-2,5)$ and $(4,8)$
4.

| $\mathbf{x}$ | $\mathbf{y}$ |
| :---: | :---: |
| -2 | 1 |
| -1 | 3 |
| 0 | 5 |
| 3 | 11 |

## Answer the following.

5. What is the y-intercept of the line graphed below?

Record your answer and fill in the bubbles on the grid.


6. Which function has $(-4,-2)$ on its graph?
A. $3 x-2 y=-16$
B. $y=\frac{3}{2} x-4$
C. $3 x-2 y=-8$
D. $y=2 x-2$

